

Existing ... Endangered ... Extinct?

Our **iCAN** mind map

THE BIG IDEA

Every single living species is uniquely adapted to its life on Earth, and that includes us, humans. From tiny tadpoles to giant squids, living things exist in an amazing variety of forms. Why is there so much variety and how do scientists sort, identify and classify the 1.7 million species living today?

Science

As scientists at iCAN we will be investigating:

- How and why living things are classified
- How a vertebrate and an invertebrate are different
- How to classify local plants and animals
- The effects of food chains in our locality
- Friendly and unfriendly micro-organisms
- How fungi are different from plants and animals
- Why composting is good for the environment

Learning Goals

- 3.1 Know that the study of science is concerned with investigating and understanding the animate and inanimate world around us
- 3.2 Be able to conduct scientific investigations
 - Posing scientific questions
 - Choosing an appropriate way to investigate a scientific issue
 - Using our scientific knowledge and understanding to predict the outcome
 - Relating the outcome to our original prediction
 - Making systematic and accurate measurements from our observations
 - Drawing conclusions based on the evidence
 - Explaining and justifying our predictions, investigations, findings and conclusions
 - Recording and communicating our findings accurately using the most appropriate medium and the appropriate scientific vocabulary and conventions
 - Repeating investigations, observations and measurements to check their accuracy and validity
 - Identifying patterns in the results
 - Using scientific language to explain any differences found in the results of investigations
 - Suggesting ways in which our investigations and working methods could be improved
 - Relating our own investigations to wider scientific ideas
- 3.3 Be able to gather evidence about materials from a variety of sources
- 3.4 Be able to discriminate between evidence and opinion
- 3.5 Understand the importance of using evidence to test scientific ideas
- 3.6 Understand some of the effects of what we learn on people's lives
- 3.7 Know about the major classifications of living things
- 3.8 Know about the effects of food chains in a variety of environments
- 3.9 Know that changes in the environment have effects on living things
- 3.10 Know about the nature, functions and effects of micro-organisms
- 3.11 Be able to recognise and name the major plants and animals in Cambodia
- 3.12 Be able to classify locally occurring plants and animals according to their features
- 3.13 Be able to recognise and name the major plants and animals in our home country
- 3.14 Understand the relationship between living things and the environment in which they live
- 3.15 Know about the structure of the human body
- 3.17 Know about similarities and differences between humans and other creatures

Technology

As designers at iCAN we will be learning:
• How to make our own compost bin

Learning Goals

- 3.4 Be able to respond to identified needs, wants and opportunities with informed designs and products
- 3.5 Be able to gather and use information to suggest solutions to problems
- 3.6 Be able to devise step-by-step plans
- 3.7 Be able to consider the needs of users when designing and making
- 3.8 Be able to select the most appropriate available tools and materials for a task
- 3.9 Be able to work with a variety of tools and materials with some accuracy
- 3.11 Be able to investigate the way in which simple products in everyday use are designed and made and how they work

International

As international citizens at iCAN we will be learning:
• How the international community can protect endangered species

Learning Goals

- 3.3 Know about ways in which the lives of people in the countries they have
- 3.4 Know about similarities and differences between the lives of people in different countries
- 3.5 Be able to explain how the lives of people in one country or group are affected by the activities of other countries or groups
- 3.6 Be able to identify ways in which people work together for mutual benefit